

[COLLISION AVOIDANCE METHOD FOR HOME AUTOMATION DEVICES USING AN ETHERNET HUB]

Abstract of Disclosure

This invention discloses a method for collision avoidance in Ethernet networks, such as home automation networks, with both personal computers and control devices attached to it. Ethernet hubs are considered as the type of device used to create the Ethernet network. When a network management message is sent as a broadcast information from one personal computer to all control devices, they will generate a delayed response to the sender computer. Such delay is generated on each control device in accordance to its own MAC address. It will guarantee different delay times on all attached control devices. The minimal time interval between two consecutive MAC addresses and the maximum possible delay time are estimated from the maximum number of expected devices attached to the hub(s).

Patent for Collision Avoidance Method for Home Automation Devices Using an Ethernet Hub

Figures